

MECHANIC STUDY GUIDE

Engine Repair - Gasoline

Heavy Duty Trucks

Listed below are a number of items and subjects which make up the mechanic certification tests identified above. An individual's ability to pass the certification test will depend upon the amount of knowledge the person has concerning these items:

Engine Mechanical Components - 16%

Cylinder blocks
Pistons
Fuel pumps
Spark plugs
Governors
Cylinder heads

SAMPLE QUESTION:

What are the minimum and maximum measurements of a shaft given as 3.750 plus or minus .010?

- A. 3.650 - 3.850
- B. 3.749 - 3.751
- C. 3.740 - 3.780
- D. 3.740 - 3.760

Diagnosis - 30%

Engine Miss
Compression test diagnosis
Rough idle
Engine knocks
Power loss
Blue smoke
Overheating

ANSWER: D

Basic Procedures - 22%

Grinding valves
Starting a flooded engine
How to measure cam lobe wear
Measuring plug wire resistance
Engine assembly
Understanding bolt markings
Valve Adjustment

Skills In Measuring - 14%

How to check cylinder head flatness
How to check crankshaft end-play
Reading a micrometer
Reading plastigage
Measuring main and rod journals

System Operation - 18%

Understanding how engines operate
Purpose for checking clearances
Understanding carburetor operation
Cooling system operation
Engine timing
Ignition systems